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# **SOLID WASTE GENERATION & DISPOSAL CAPACITY REPORT**

**JUNE 2007**

Presented by the Louisiana Department of Environmental Quality  
To the House Committee on the Environment & Senate Committee on Environmental Quality

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## I. EXECUTIVE SUMMARY

Today's solid waste management system in Louisiana is functioning well and is expected to continue to do so for the foreseeable future. Hurricanes Katrina and Rita made significant demands on the waste disposal system despite assertive efforts to avoid using municipal solid waste landfills. Municipal and private sector efforts continue to reduce the toxicity and volume of waste that is being generated. According to *Biocycle Magazine*, Louisiana was ranked 3<sup>rd</sup> among the states in the Midsouth Region with a 13.2% recycling and composting rate in 2004. Growth in the overall municipal solid waste stream continues to exceed the growth of recycling resulting in more solid waste being disposed landfills. Each ton of solid waste that is recycled is one less ton of solid waste that requires disposal. Implementing waste management strategies, such as source reduction, reuse, recycling, or composting, defers the need for additional landfills for the disposal of municipal solid waste.

Louisiana has seen a marked increase in the number of construction and demolition debris landfills as an alternative to the more expensive Type II (MSW) landfill. This does not take into consideration the establishment of temporary sites established for hurricanes Katrina and Rita. The Department is in the process of closing the hurricane debris sites.

Louisiana should be proud of its continued commitment to require and provide for environmentally conscious solid waste disposal facilities. However, only by adopting aggressive waste reduction, recycling, and composting actions and programs, will the state be able to wisely utilize existing disposal capacity and reduce the need for future disposal capacity.

### **Recommendations:**

1. The Department of Environmental Quality, in cooperation with industry, interested citizen groups and local governments, should develop by rule, standardized methods for evaluating the "physical capacity" of a solid waste landfill site and establishing a method for determining the "permitted capacity" of solid waste landfills in Louisiana. (\$60,000)
2. Louisiana should consider adopting waste reduction as a priority. Waste reduction is quite simple: do not generate a waste. It is the most cost effective method. (\$0)
3. The Department should assist local government landfill operators with performing cost analysis in order to determine the cost of landfill disposal and calculate the replacement cost of landfill capacity. (\$120,000)
4. The Department should explore options for the development of curbside waste management collection in underserved areas of the state. (\$0)
5. The Department of Environmental Quality should promote waste reduction and Zero Waste concepts in business, industry, and government. (\$0)
6. The Department should expand its efforts to funding local efforts in the areas of Special Waste Management, including, but not limited to; Household Hazardous Materials programs, Universal Wastes, tires, and mercury containing devices. (\$0)
7. The Department should monitor and collect data on construction and demolition debris disposal. Continue to promote the development of reuse and recycling of this waste stream. (\$0)
8. The Department should collect data on wastes being burned for energy recovery. (\$0)
9. The Department should work with the Louisiana Municipal Association and the Louisiana Police Jury Association to maximize participation from local governments in solid waste matters, including the Annual Recycling and Waste Reduction Report. (\$0)

## II. INTRODUCTION

The purpose of this report is to review and analyze how communities and businesses in Louisiana manages or do not manage their solid wastes, to identify potential future management issues, and to measure Louisiana's recycling progress. Additionally, the report provides insight on disposal capacity and how that may be impacting disposal fees.

The Louisiana Department of Environmental Quality is required by La. R.S. 30:2162 to report biennially to the Legislature on:

- statewide generation of solid waste;
- statewide recycling rates;
- available disposal capacity; and
- how changes in available disposal capacity have affected or are likely to effect disposal prices.

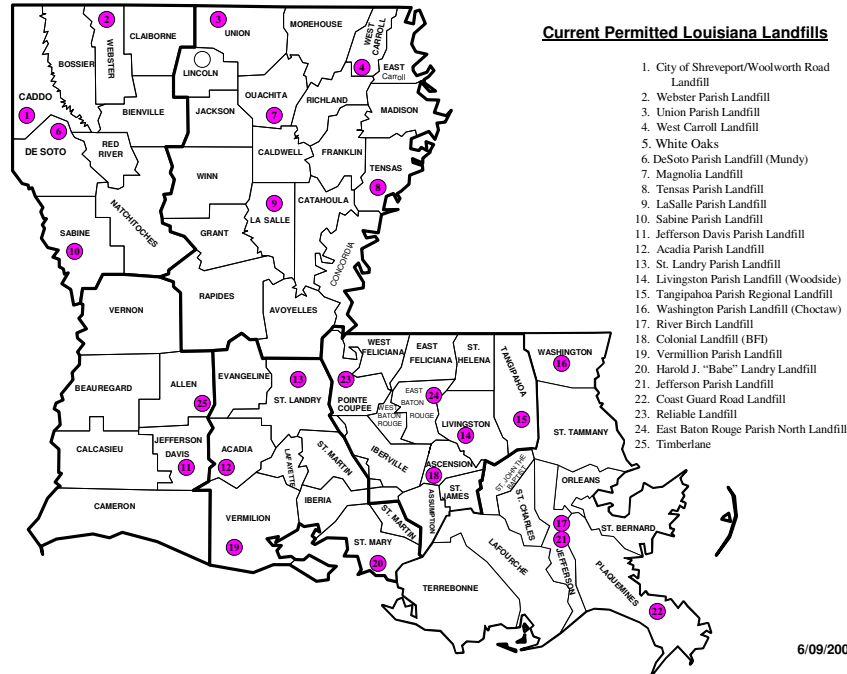
### **A Brief History of Garbage**

Garbage has been accompanying man for thousands of years. How man has dealt with garbage has drastically changed over the centuries. In fact, archaeologists revel at the opportunities garbage has given them to learn about ancient civilizations. There has been a continuing effort to determine just how much waste exists in the United States and how it is disposed. The United States Public Health Service began to develop a methodology for quantifying and characterizing waste in the 1960s and 1970s. Their methodology is based on the supposition that they can determine what will eventually be waste by identifying what materials are produced. This methodology was continued by the Office of Solid Waste with the establishment of the U.S. Environmental Protection Agency. Their annual report provides detailed information about waste in the United States and provides an estimate of waste generation per person. Unfortunately, the data is generated nationally and they do not calculate waste generation rates at the state level.

In Louisiana, the Department of Environmental Quality requires that waste disposers report the quantity of waste disposed and requires additional information on the waste itself. The central purpose of this reporting system was to assess fees to administer the Louisiana Solid Waste Program. The reports are submitted in paper format on forms provided by the department and until 1997, were recorded in a hierarchical computerized database known as FOCUS.

The U.S. Environmental Protection Agency has clear definitions that identify both types of waste and the sources of the waste. Louisiana has developed definitions of waste, waste sources, recycling and recycling measurement by statute and rule. In 1989, the National Recycling Coalition provided information on developing a standard database for solid waste information and recycling in pursuit of a national recycling database. What becomes clear upon examining the various definitions and recycling rate methodologies is that definitions and measurement of solid waste are not consistent and neither are the methods for determining recycling.

## Map1. Current Permitted Louisiana Landfills



## III. DEFINITIONS AND ACRONYMS

The following definitions are provided to assist the reader in reviewing this document:

**Annual Recycling Reports** – these are the reports submitted to the Department of Environmental Quality by parishes and municipalities, as required through LA R.S. 30. §2413 B. These reports convey their efforts related to municipal solid waste management and provide detail on the tonnage of solid wastes they have overseen and a description of the various solid waste management practices utilized.

**Bulky Wastes** - these are solid wastes that do not typically fit into a residential waste container, and may include such items as wood, large metal appliances and construction materials.

**Construction and Demolition Debris - (C&D)** – these are the wastes generated by building, remodeling and/or destruction activities and may include such wastes as wood and wood products, concrete and brick, gypsum board, shingles and other common components of buildings

**Cost analysis (for waste disposal)** - full cost accounting of expenditures associated with solid waste collection, disposal and recycling.

**Household Hazardous Materials – (HHM)** - items generated by households that are corrosive, toxic, ignitable, or reactive, and as such are hazardous to humans and/or the environment if disposed of improperly. Much of this material is recyclable.

**Recycling Residue** - residuals of municipal solid waste resulting from the processing of solid waste processing prior to landfilling, and includes, but is not limited to, ferrous metals, contaminated materials, glass, grit and fine organic matter.

**Municipal Solid Waste (MSW)** – solid wastes emanating from household, schools, apartments and normal commercial activities. Typically these wastes are deposited at a Type II facility.

**Solid Waste Disposer Annual Report** – a required indicating quantities and types of solid waste (expressed in wet-weight tons per year), received from in-state generators and from out-of-state generators, during the reporting period. (fiscal year) The annual report also indicates the estimated remaining permitted capacity at the facility as of the end of the reporting period (expressed in wet-weight tons). All calculations used to determine the amounts of solid waste received for disposal during the annual-reporting period and to determine remaining capacity shall be submitted to the administrative authority.

**Special waste** - wastes that exist in such an unusual quantity or in such a chemical or physical state that require special handling, transportation and disposal/recycling procedures. (medical waste, tires, white goods)

**Universal Wastes** – a category of wastes that include: PCB containing lighting ballasts; Cathode Ray Tube (CRT) containing devices; electronics, antifreeze; fluorescent lamps; other lamps containing hazardous wastes; and, mercury-added devices from commercial sources.

**Waste-To-Energy facilities (W-T-E)** – incinerators which receive municipal solid waste and through combustion, recover energy and convert it into electricity. This process produces an ash which still must be disposed.

The following acronyms are provided to assist the reader in reviewing this document:

**CRT** –‘Cathode Ray Tube’, the projection device located in certain computer monitors and television sets.

**DEQ** – the Louisiana Department of Environmental Quality.

**EPA** –the Environmental Protection Agency.

**NRC** –the National Recycling Coalition.

**RCRA** -is the Resource Conservation and Recovery Act. Enacted by Congress in 1976, RCRA's primary goals are to protect human health and the environment from the potential hazards of waste disposal, to conserve energy and natural resources, to reduce the amount of waste generated, and to ensure that wastes are managed in an environmentally sound manner. RCRA regulates the management of solid waste (e.g., garbage), hazardous waste, and underground storage tanks holding petroleum products or certain chemicals.

**Subtitle D** – Subtitle D of the Resource Conservation and Recovery Act (RCRA) addresses non-hazardous solid wastes, including certain hazardous wastes which are exempted from the Subtitle C regulations such as: hazardous wastes from households and from conditionally exempt small quantity generators. Subtitle D also includes garbage (milk containers, coffee grounds), non-recycled household appliances, the residue from incinerated automobile tires, refuse such as metal scrap, wall board and empty containers, and sludge from industrial and municipal waste water and water treatment plants and from pollution control facilities.

## **IV. WASTE HIGHLIGHTS FOR 2006**

### **Waste Management Policies**

- Louisiana continues to implement the state's waste management hierarchy that gives preference to waste reduction and recycling over disposal.
- The Department continues to monitor disposal capacity in order to maintain sufficient capacity to meet state needs.
- A significant portion of the debris created by hurricanes Katrina and Rita was diverted from MSW landfills through the use of C&D landfills, incineration, composting and recycling.

### **Recycling**

The state-wide recycling rate for 2006 is estimated to be 15% (recycling & composting).

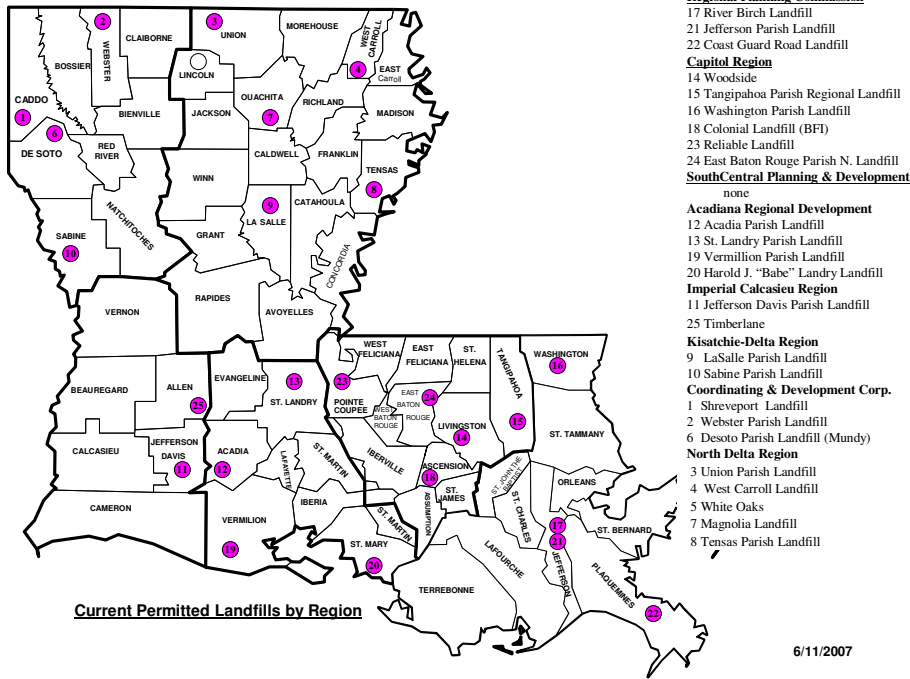
### **Waste Generation and Waste Reduction**

- Louisiana residents, businesses, and visitors generated 4,853,738 tons of MSW in FY 2005-2006, an increase of 7% percent from 2004-2005.
- Over the last decade, efforts have been directed at reducing the toxicity of Louisiana's waste stream by the promotion of **A**ntifreeze, **B**attery, used **O**il, latex **P**aint collection (ABOP) Household Hazardous Waste Collection events, and programs for selected waste streams such as electronics, mercury devices and cathode ray tubes.
- Disposal bans have been placed on certain products (appliances, used oil, mercury devices, tires and lead acid batteries). The Department is utilizing Beneficial Environmental Project funds to fund the development of local and regional household hazardous waste collection centers.

### **Disposal**

- Louisiana businesses delivered an estimated 32% of the MSW generated in 2006 to the 25 operating landfills.
- Louisiana buried 76.8% of its waste in landfills in FY 2005-2006. Louisiana burned 4.2 % of its waste for energy. This included tires and wood chips, but could also include agriculture byproducts and crop waste, sludge waste, and other biomass solids, liquids and gases.
- Disposal capacity at the existing municipal and commercial landfills continues to be consumed, reducing the available volume remaining under current permit conditions. In 2004, more disposal capacity was obtained by the permitting of the Timberlane Landfill in Allen Parish.
- Construction and demolition debris disposal capacity is expanding. Plans have been made to capture capacity estimates from C & D landfills in the same manners as currently being provided for Type I and Type II landfills management options, including regional solutions, is a priority.
- A total of 260,588 tons of out-of-state municipal solid waste was shipped in to Louisiana landfills, according to figures provided to the Library of Congress by the states of Mississippi and Texas. Solid Waste Disposer Annual Reports indicate that 77,190.12 tons were imported to Louisiana landfills. The reason for the discrepancy is not known.

## Map 2. Current Permitted Landfills by Region



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## Disposal Capacity

- The sixteen municipally owned Type II (MSW) landfills have just over 22 million cubic yards of physical capacity remaining. However, the average life of existing permits for these facilities is 6 years, assuming that all applications in review are approved.
- The nine existing commercially-owned landfills have about 133 million cubic yards of available capacity at the end of FY 2006. However, the average life of existing permits for these facilities is 5 years, assuming that all applications in review are approved.
- In total, the state has an estimated 5 to 6 years of remaining landfill capacity under active permits.

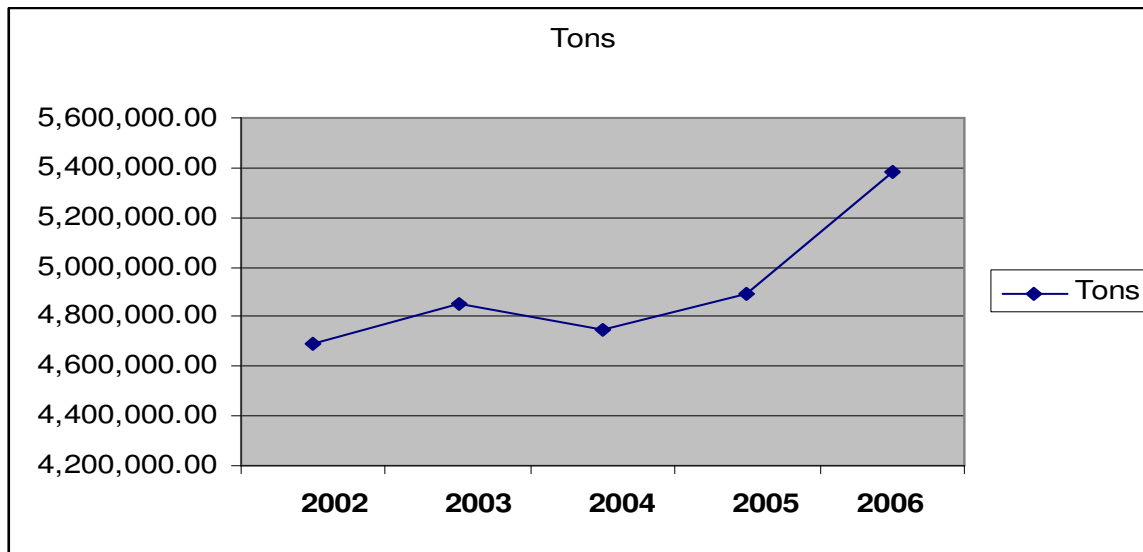
## V. WASTE MANAGEMENT AND RECYCLING

In evaluating generation rates, management strategies, and disposal capacity, this report considers only Municipal Solid Waste (MSW) and its residues. Solid Waste is that waste which is typically generated by households, businesses, government facilities, schools and may be managed by municipalities. It includes non-bulky waste, such as,

(corrugated cardboard, newsprint, office and mixed papers, food waste, plastics, glass, metals and textiles) as well as bulky waste, such as; tires, appliances, furniture, construction/demolition debris, wood waste and yard waste). Industrial and agricultural waste streams are not included in this report.

Louisiana municipalities have designed and implemented various solid waste management facilities over the years, resulting in the construction and operation of approximately 26 landfills, 2 transfer stations, several “pickup” stations, over 25 recycling programs (some communities participate in more than one program) and over a dozen composting facilities. In 2006, the solid waste disposal facilities operating in Louisiana included nineteen government owned landfills permitted to accept MSW, (seven of which are permitted to accept special wastes, such as medical waste), and eight commercial landfills permitted to accept municipal solid waste (including construction/demolition debris) and special wastes. Of the twenty-six MSW (type II) landfills, 22 are also permitted to accept industrial wastes and are dual permitted as Type I landfills. (Terrebonne Parish has a permitted Type II landfill but does not accept waste)

**Figure 1. Louisiana MSW Landfilled 2001-2006**



### **Solid Waste Disposal Data**

Since 1989, Louisiana law has charged the Department of Environmental Quality with the management, reduction, and recycling of solid waste for the State. The amount of waste generated within municipalities and managed by them (including reuse, recycling, composting and disposal) is to be reported to the Department annually by every Parish, in conjunction with its major municipalities.

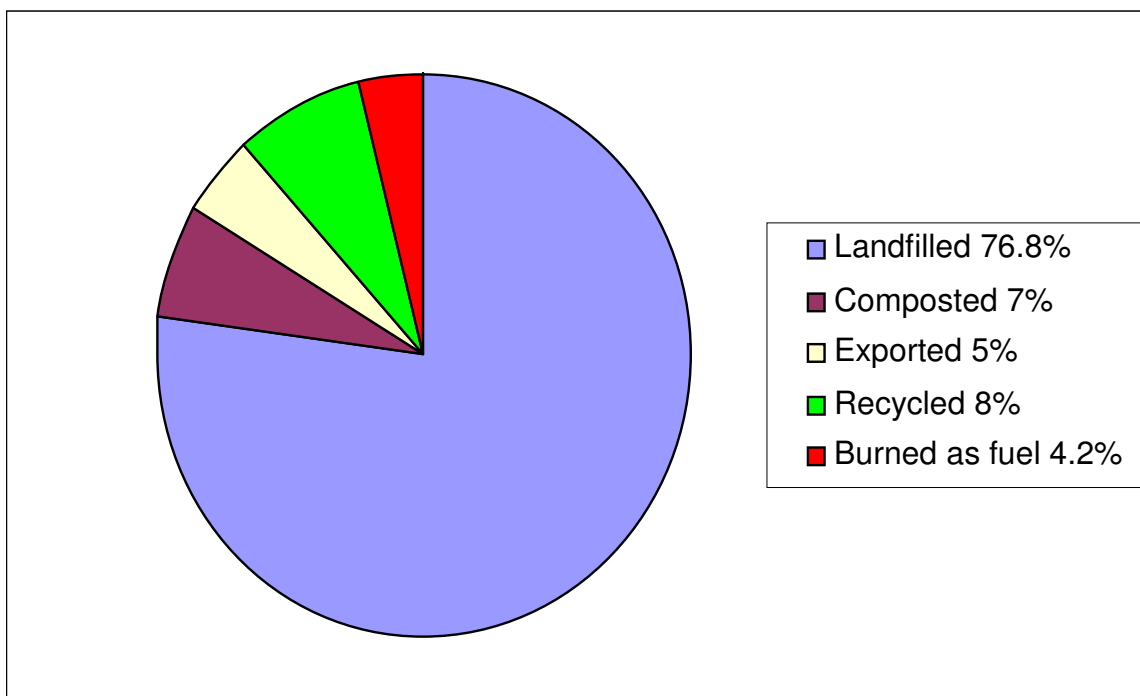
The estimated statewide solid waste generation combines the amount of waste processed and disposed and the tonnage recycled, composted, and reused.

## **Statewide MSW Generation**

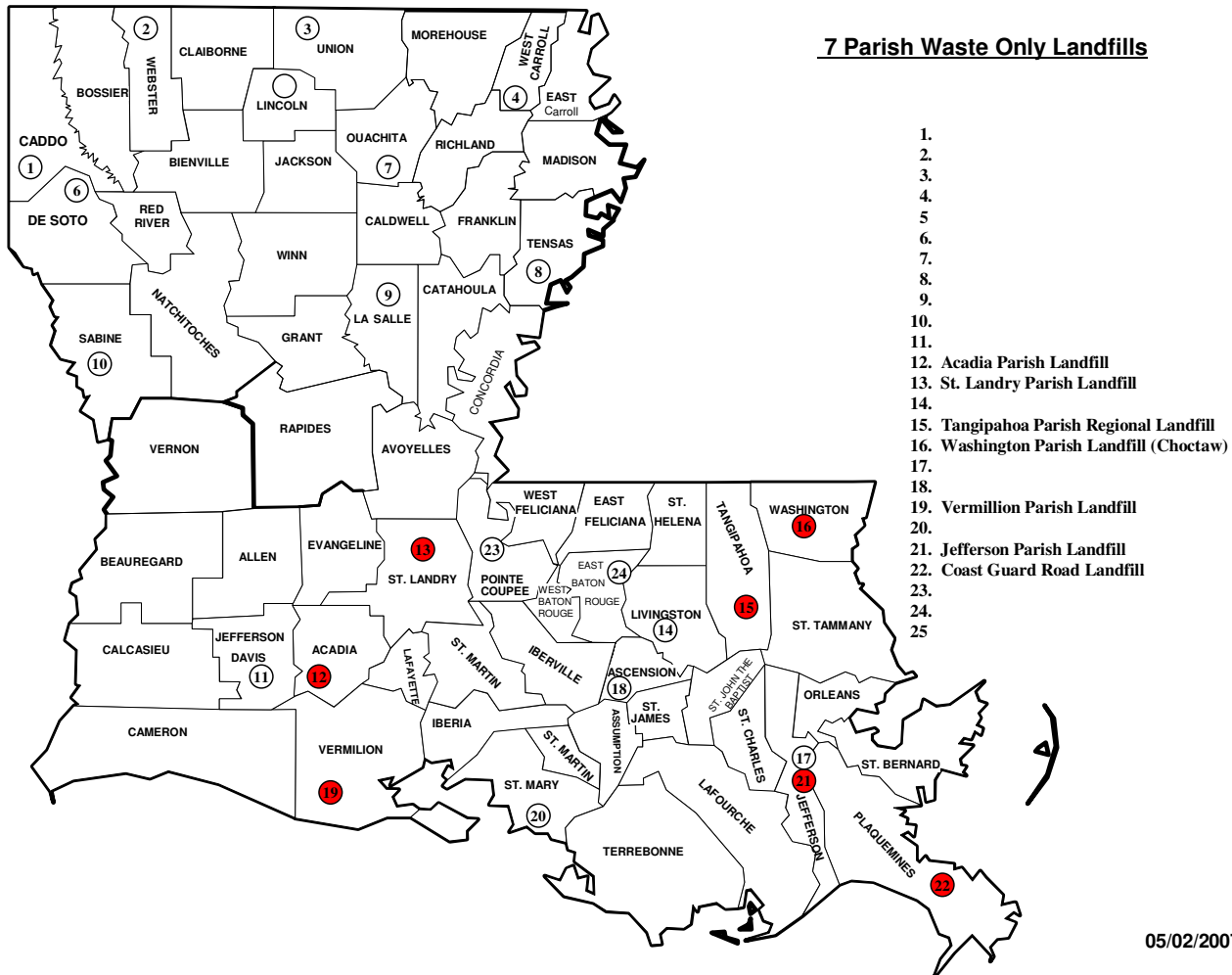
Louisiana residents and visitors generated 5,336,745.23 tons of MSW in 2006; this is an increase over the 4,682,125.70 tons of MSW in 2005 the 4,750,159 tons in 2004. See Figure 1.

MSW management methods and amounts for 2006 (disposal, recycling, and generation) are outlined in *Figure 2*.

**Figure 2. Louisiana Waste Management Methods 2006**



### Map 3. Landfills Taking Only In-Parish Waste



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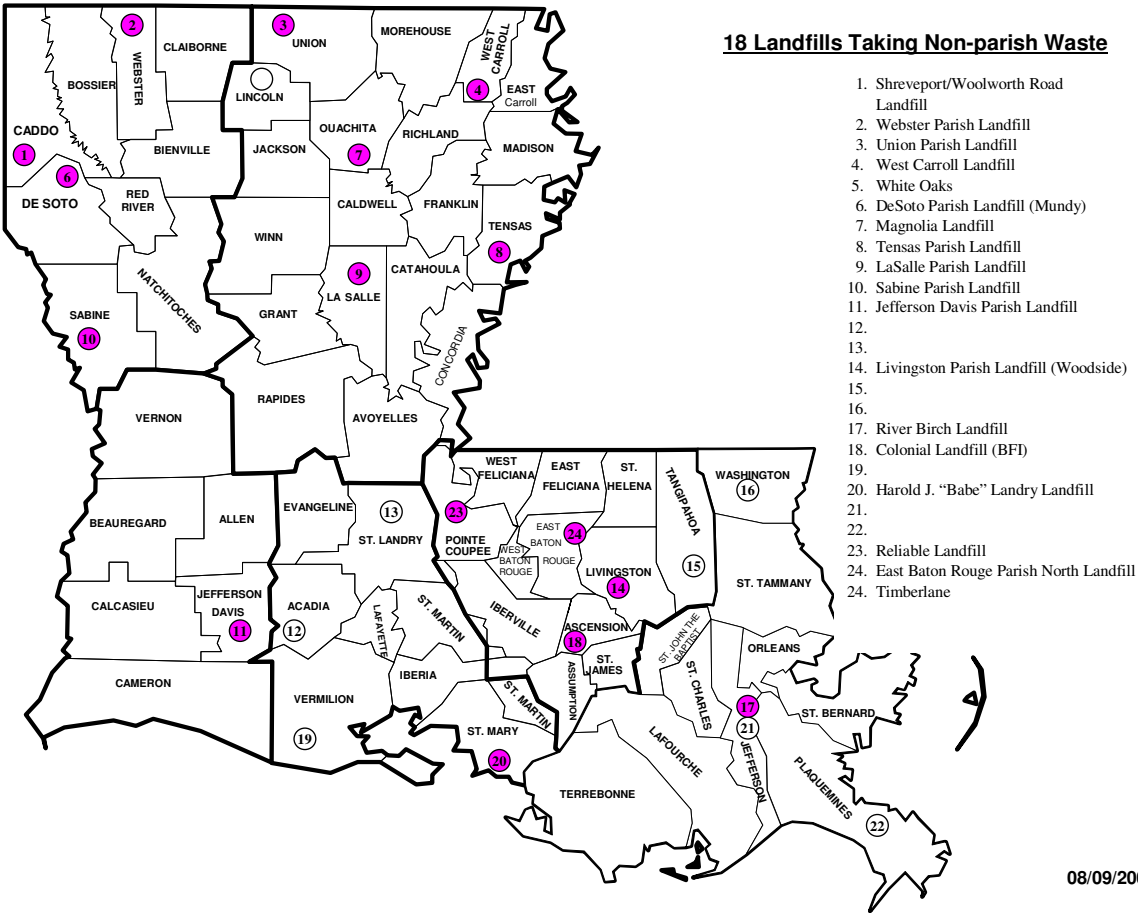
### Per Capita MSW Generation

Louisiana MSW generation data, when calculated on a 'per person' basis, indicates that for each resident, approximately 2,511 pounds (roughly 1.25 tons) of municipal solid waste is generated in a year. This equals about 6.86 pounds of waste per person per day. This number is derived from the total municipal solid waste generated in Louisiana for 2006 (5,336,745.23) and the estimated 2006 population of 4,287,768.

This exceeds the national 'per person' waste generation weight reported by the U.S. Environmental Protection Agency (EPA), which in 2005 (latest available data) was approximately 4.54 pounds of waste per person per day.

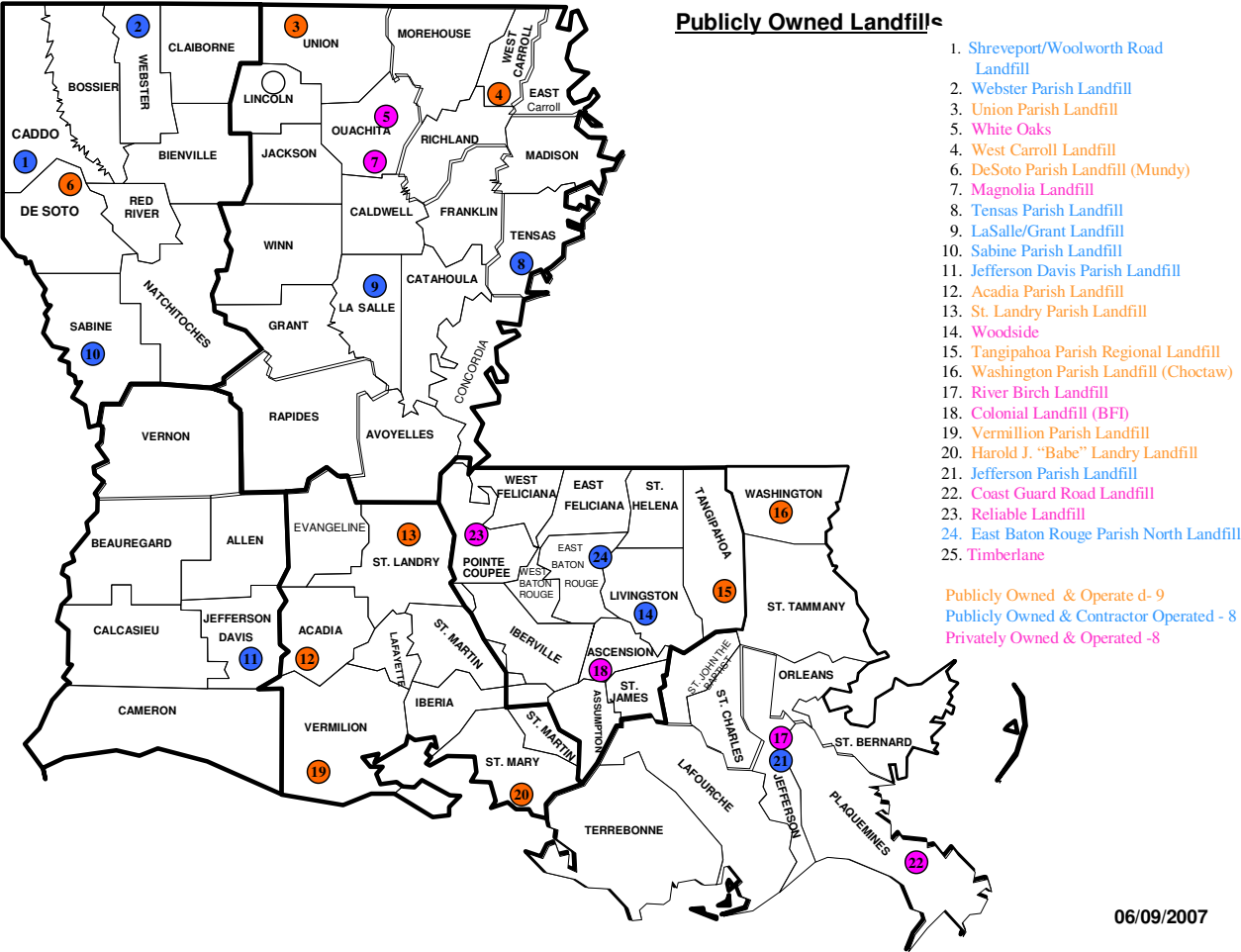
One obvious reason why Louisiana's per person numbers are higher than the national average is that Louisiana MSW facilities will accept 'construction/demolition debris' (C&D) in loads of municipal solid waste. The U.S. EPA does not include C & D in its MSW definition.

**Map 4. Landfills Importing Out-Of-Parish Waste**



Louisiana’s tourist industry is one of its major economic sectors and this translates into a waste impact from visitors to Louisiana. In 2006, an estimated 45.5 million visitor days were counted for Louisiana. This is the equivalent of an additional 124,657 residents or a 3% increase from the current population level.

**Map 5. Landfill Ownership and Management Properties**



**Table 1. Fiscal Year 2005-2006 Reported Tonnages**

Facility Name	Reported Physical Tonnage	Permit expires*	Loc Gov Physical Tonnage	Commercial Physical Tonnage
Acadia Landfill	85,384.20	5/9/2015	85,384.20	0
Coast Guard Rd. Landfill	98,883.00	6/18/2008	0	98,883.00
Colonial Landfill (BFI)	395,635.60	12/31/2007	0	395,635.60
CWI, White Oaks	111,322.00	8/10/2012	0	111,322.00
Desoto Landfill (Mundy)	55,119.30	4/30/1995	55,119.30	0
East Baton Rouge North Landfill	439,485.20	10/4/2012	439,485.20	0
Jefferson Davis Landfill	361,664.60	7/23/2008	361,664.60	0
Jefferson Landfill	506,229.50	2/14/2006	506,229.50	0
LaSalle/Grant Landfill	506,229.50	6/5/2008	506,229.50	0
Magnolia Landfill	189,672.00	2/6/2007	0	189,672.00
Reliable Landfill	40,824.00	4/19/2006	0	40,824.00
River Birch Landfill	1,132,622.00	5/8/2007	0	1,132,622.00
Sabine Landfill	81,714.90	1/28/2008	0	81,714.90
St. Landry Landfill	73,544.00	5/31/1995	73,544.00	0
St. Mary Landfill	18,168.00	12/31/2009	18,168.00	0
Tangipahoa Regional Landfill	135,924.30	1/23/2014	135,924.30	0
Tensas Landfill	56,114.00	6/28/2015	0	56,114.00
Terrebonne Landfill (pickup)				0
Timberlane Landfill	112,862.90	12/23/2009	0	112,862.90
Union Landfill	81,293.00	8/12/1998	81,293.00	0
Vermilion Landfill	91,663.00	1/1/2011	91,663.00	0
Washington Landfill	45,124.00	2/9/2016	45,124.00	0
Webster Landfill	133,190.20	2/9/2010	133,190.20	0
West Carroll Landfill	23,539.73	8/24/2011	23,539.73	0
Woodside Landfill	189,672.00	1/29/2006	0	189,672.00
Shreveport Landfill	370,864.30	2/24/2006	370,864.30	0
<b>TONS</b>	5,336,745.23		2,927,422.83	2,409,322.40

\* Facilities with expired permits and a renewal application submitted are usually granted extensions by a DEQ Administrative Action.

## **Recycling**

Since 1989, Louisiana law has charged the Department of Environmental Quality with analyzing and preparing a plan for the management, reduction, and recycling of solid waste for the State. In response to this directive, the State has kept a census of the percentage of municipal solid wastes recycled in Louisiana. This census is part of the ongoing effort of the State to reach a recycling goal of 30% of the municipal solid waste stream and to track progress toward achieving this goal.

This information is used in conjunction with data collected from the submitted Annual Recycling Reports, which are also used by parishes and municipalities to calculate their recycling rates. Louisiana Parishes in cooperation with their municipalities are required to report MSW disposal and recycling data. Some local governments have been diligent and consistent in their report. Unfortunately, the vast majority do not report. There is no requirement for private sector recycling and recycling facilities to report. There is no requirement for factories, mills, plants and business to report.

## Recycling rate calculations

The recycling rate is derived by using recycling and disposal data in conjunction with One of the two acceptable methods, as follows:

### METHOD ONE

$$\% \text{ reduction} = \frac{A}{A + B} \times 100$$

A = waste reduction total (tons). (Waste Reduction Total must be determined as provided in LAC 33:VII.10307.B.1.a.)

B = total waste landfilled (tons);

### METHOD TWO

$$Z = \frac{X}{Y} \times 100$$

% Reduction = 100% - Z

X = current year tonnage landfilled.

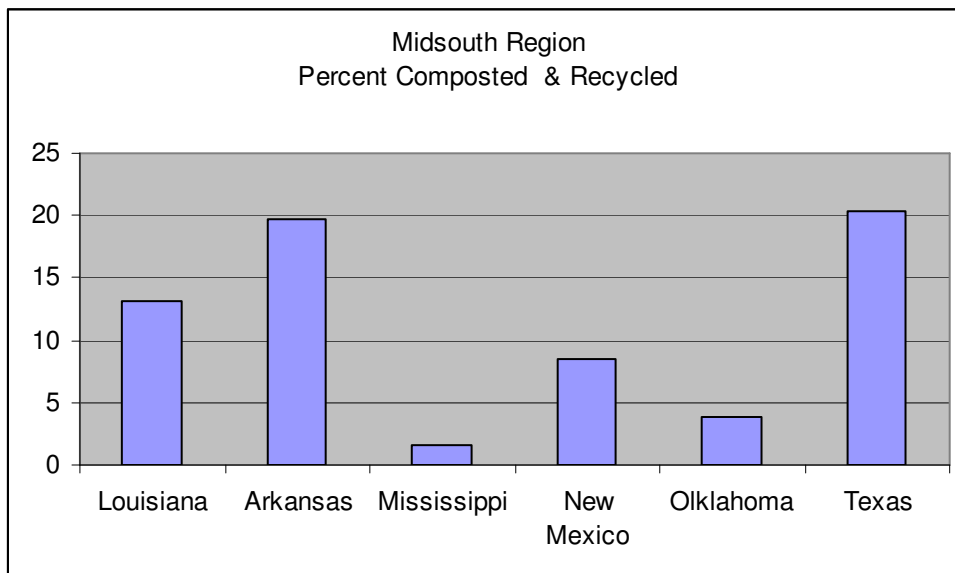
Y = tonnage landfilled in base year (1989 or another year approved by the administrative authority).

This process is not a precise measurement. Some data is incomplete, particularly for composting and reuse efforts in the public sector and recycling activities in the private sector.

## Statewide Recycling rate

Based upon the limited information and data received, the Department estimates that 8% of the municipal solid waste stream was recycled in 2006. According to *Biocycle Magazine*, Louisiana was ranked 3<sup>rd</sup> among the states in the Midsouth Region with a 13.2% recycling and composting rate in 2004.

**Figure 3. Midsouth Region Recycling and Composting**



**Table 2 Local Governments Submitting 2006 Recycling Reports**

**Annual Recycling  
Reports  
Submitted for 2006**

**Parish/City**

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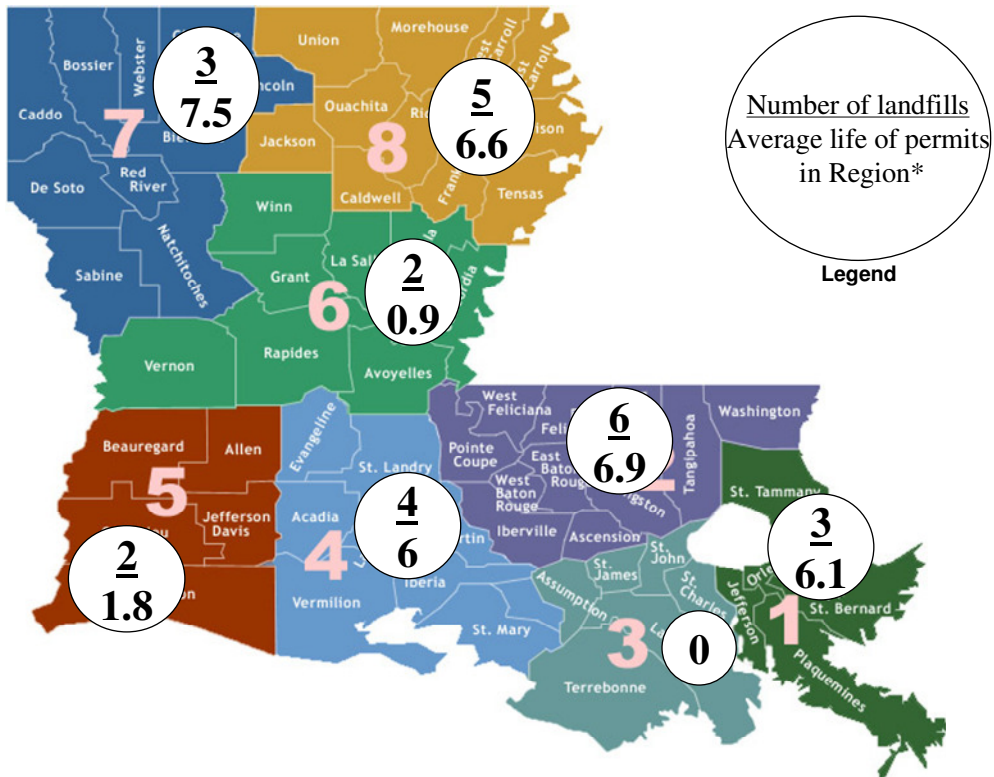
Barksdale AFB  
Benton  
Bossier City  
Caddo  
Caddo/Shreveport  
Calcasieu  
Calcasieu/Lake Charles  
Concordia  
East Baton Rouge  
East Carroll  
Evangeline  
Franklin/LSU Ag Center  
Iberia  
Lafourche  
Lincoln  
St. James  
Tangipahoa/Independence  
Terrebonne/Houma  
Vermilion  
Vernon, Fort Polk  
Vernon, Fort Polk  
West Baton Rouge Parish less Port Allen

**VI. CAPACITY**

While landfills in Louisiana are required to calculate remaining capacities and submit their calculations, there is no standardized procedure for these landfills to follow. The primary aim of this requirement was to glean from landfill owners and operators their best estimate of their remaining permitted capacity. One landfill did not complete the capacity portion, but later provided the figures upon request. None of the Type II landfills provided the required calculations with their 2006 Solid Waste Disposer Annual Report. This level of response makes it difficult for the Department to determine if accepted engineering practices were used to determine the remaining permitted capacity,

## Map 6. Number of MSW Landfills per Region

### Number of MSW Landfills by Region



\*assumes all permit applications are approved

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One issue with the submitted capacities is that landfills appear to report only the physical capacity of their site and do not take into the consideration the expiration date for their current permit. Completely absent from considerations on capacity are any analysis of populations being served by landfills, hauling distances and costs to customers. Permits are issue for a ten year period and then expire. Existing permit holders can seek a modification to their permit that would expand their capacity. Existing permit holders do submit renewals to their permits, though this is not always true. When faced with increasingly tighter RCRA Subtitle D regulation, a number of Louisiana landfills elected to close rather than continue operating.

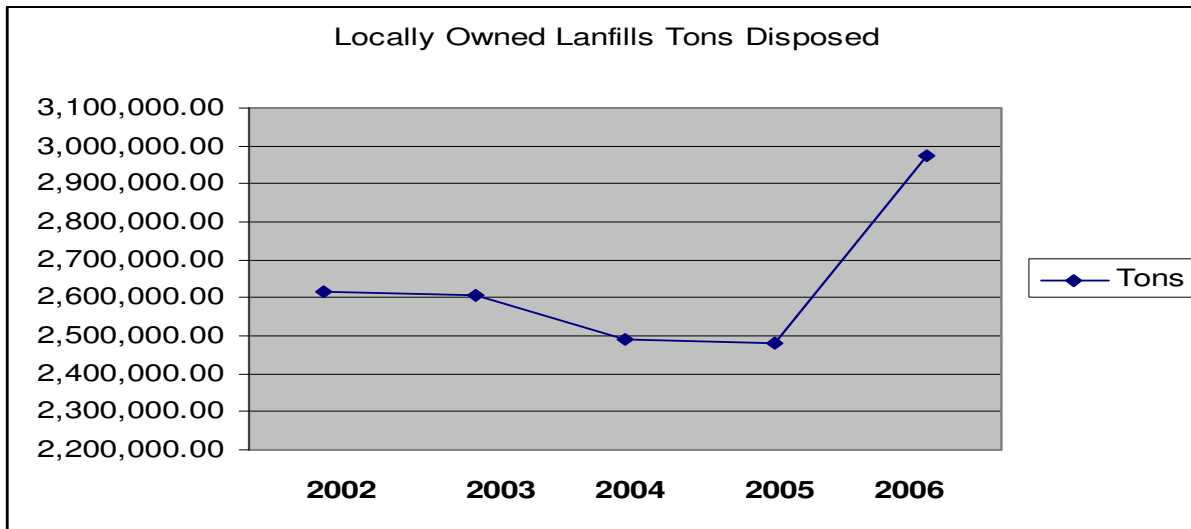
### Capacity Calculations

Acceptable estimating tools for measuring landfill capacity need to have three interrelated properties:

1. Reliability. The measure needs to be reliable. The method tools need to be stable, accurate and have minimal error. Different users should be able to replicate results in repeated applications.
2. Validity. The measure needs to be valid. The method tools need to measure what they intended to measure.
3. Usability. The measure needs to be usable. The tool is suited for gathering the data. In other words, the tool should be straight forward in application, not too costly to use and be suitable for the application.

Since the Department can not determine that the measurement tools currently used to calculate the reported landfill capacities do meet these requirements listed above, capacities in this report are provisional.

**Figure 4. 2002-2006 -- Municipal Landfill Tonnages**



### **1. Municipally-operated Type II (MSW) landfills**

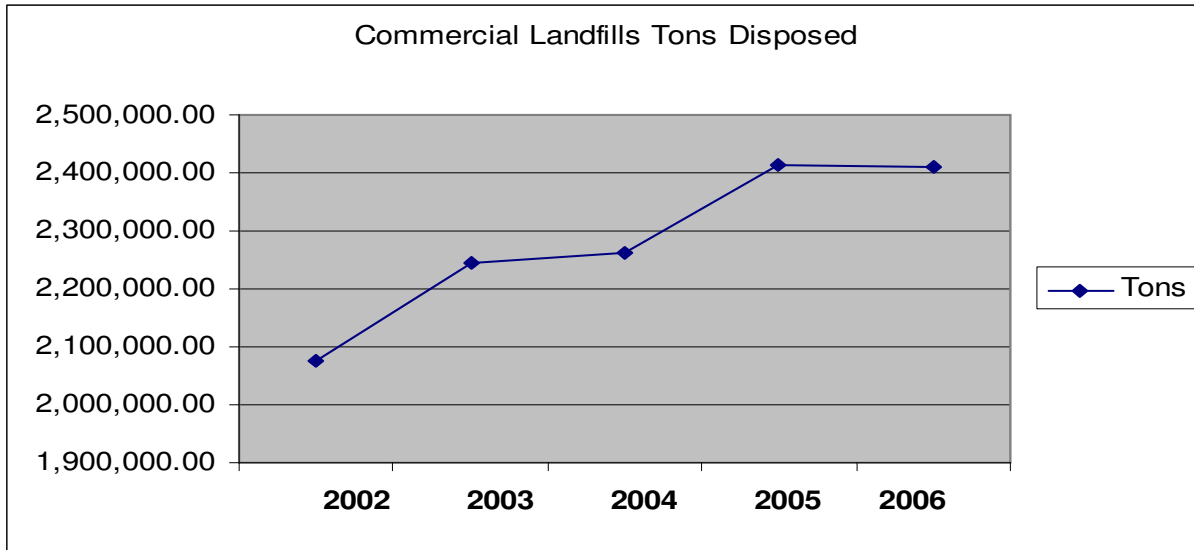
The 2006 Solid Waste Disposer Annual Reports indicate that among the fifteen municipally-operated MSW landfills, there are approximately 19,501,429.58 tons of remaining physical capacities. This physical capacity would appear adequate to meet future needs but fails to consider the permitted life of the facility which is finite by statute. Individual by individual landfill capacity is not to be confused the calculation of a state-wide disposal capacity concern.

Nationally, publicly operated landfills comprise about two-thirds of all landfills. This pattern is replicated in Louisiana. Generally speaking, newer landfills have been developed by the private sector.

### **2. Commercial landfills**

The ten commercial landfills operating in the state have provided need capacity for local governments as they transitioned into the era of tighter Subtitle D regulation. Disposal capacity the fifteen for profit landfills was reported to be 113,647,039.68 tons. Commercially owned landfills reported a physical capacity is almost double the reported site capacity for the local government owned landfills. The River Birch landfill in Jefferson Parish has the highest reported physical capacity at 48,500,000 tons or 43.6 years. As with the locally owned landfills, this physical capacity would appear adequate to meet future needs but, fails to consider the permitted life of the facility which is finite by statute and the distance that waste has to be hauled for disposal. Individual by individual landfill capacities should not to be confused with the calculation of a state-wide disposal capacity.

**Figure 5. 2002-2006 -- Commercial Landfill Tonnages**



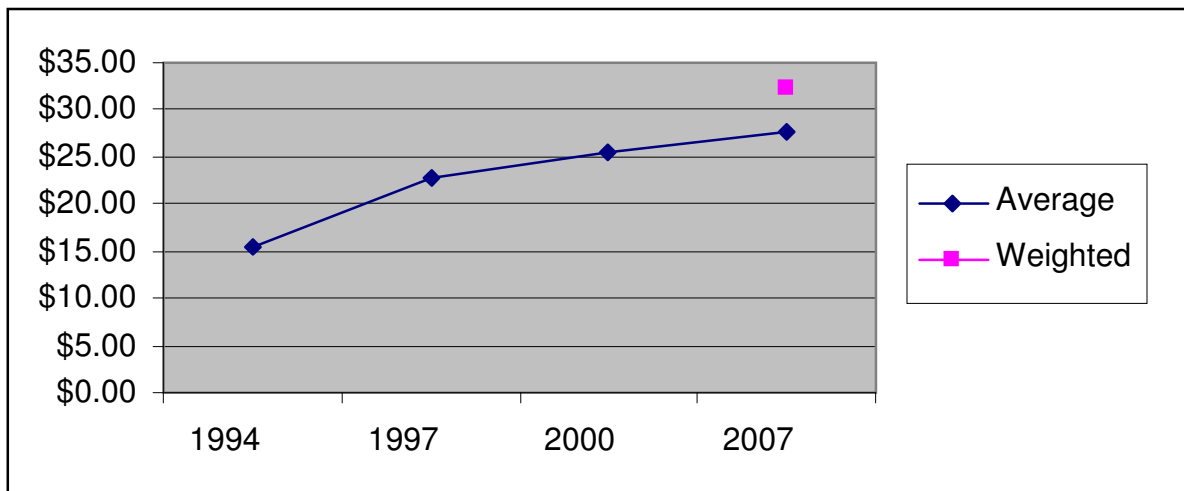
**Assumption - Waste Disposal Capacity**

1. A continued growth in waste generation
2. Little change in waste imports or exports
3. A projected increase in the use of wastes (wood) as energy sources.
4. The continued operation of the local government facilities
5. Recycling efforts slightly increasing annually
6. Increase in then number of C&D facilities and the recycling of C&D materials, including local government C&D facilities

**Waste Pricing**

Tipping fees for landfilling in Louisiana have been remarkably stable and restrained

**Figure 6. Landfill Fees**



In 2005, national landfill tipping fees were about \$36.50. Fees ranged from an average of \$70.00 a ton in the Northeast to \$24.00 a ton in the South Central Region where Louisiana was listed along with Arkansas, Arizona, New Mexico, Oklahoma and Texas. A recent survey of Louisiana landfills showed the average tipping fee as \$27.69. It would appear Louisiana landfill fees are remaining stable and are independent of reported capacities.

## VII. CONCLUSIONS AND RECOMMENDATIONS

Louisiana has an adequate number of municipal landfills statewide. The state has been proactive in informing and educating local governments and industry about choices involving recycling, household hazardous materials collection, electronics recovers, rate setting and Universal Waste options. Local success in these areas listed, ranges from little effort to exemplary programs. The Department implemented the national waste hierarchy during hurricanes Katrina and Rita and sought to preserve MSW landfill capacities and divert debris to reuse, recycling, incineration or C&D site disposal.

1. Recommendations: The Department of Environmental Quality, in cooperation with industry, interested citizen groups and local governments, should develop by rule, standardized methods for evaluating the “physical capacity” of a solid waste landfill site and establishing a method for determining the “permitted capacity” of solid waste landfills in Louisiana. (\$60,000)
2. Louisiana should consider adopting waste reduction as a priority. Waste reduction is simple: do not generate a waste. It is the most cost effective method. (\$0)
3. The Department should assist local government landfill operators with performing cost analysis to determine the cost of landfill disposal and calculate the replacement cost of landfill capacity. (\$120,000)
4. The Department should explore options for the development of curbside waste management collection in underserved areas of the state. (\$0)
5. The Department of Environmental Quality should promote waste reduction and zero waste concepts in business, industry, and government. (\$0)
6. The Department should expand its efforts to fund local initiatives, through the use of beneficial environmental projects to local governments. This would be in the areas of Special Waste Management, including, but not limited to; household hazardous materials programs, universal wastes, tires, and mercury containing devices. (\$0)
7. The Department should monitor and collect data on construction and demolition debris disposal and continue to promote the development of reuse and recycling of this waste stream. (\$0)
8. The Department should collect data on wastes being burned for energy recovery. (\$0)
9. The Department should work with the Louisiana Municipal Association and the Louisiana Police Jury Association to maximize participation from local governments in solid waste matters, including the Annual Recycling and Waste Reduction Report. (\$0)